



Dart Aerospace Ltd.  
1270 Aberdeen St  
Hawkesbury, ON  
K6A 1K7  
Canada

Tel (613) 632-5200  
Fax 613 632-5246

**RBWA353A04-08**  
**Job Sheet 204116**



**Part No:** RBWA353A04-08

**Job Qty:** 8 pcs

**Part Name:** Screw (Modified B/O)



**Part Weight:** 0 lbs

**Status:** New

**Priority:** Medium

**Job Created:** 12/3/19

**Job Tracking No:**

**Due Date:** 1/2/20

**Created By:** Marie Lajeunesse

**Type:** SOLD

**Description:**

**Note:** DWG RBWA353A04 Rev.F IPP Rev. A 19.11.15 New issue DP Verify DD

**Ship Via:**

### Bill of Materials

### Job Routing

| Op No | Operation              | Qty   | Start Date | Due Date | Standard  |         | Workcenter/Supplier    |           | Sign-off |
|-------|------------------------|-------|------------|----------|-----------|---------|------------------------|-----------|----------|
|       |                        |       |            |          | Setup Hrs | Run Hrs | Workcenter / Supplier  | Lead Time |          |
| 100   | Conventional Lathe - 1 | 8 pcs | 1/2/20     |          | 0.25      | 0.50    | Conventional Lathe - 1 |           | 1/11/19  |
|       |                        |       |            |          |           |         | Conventional Lathe - 2 |           |          |
| 110   | QC 2                   | 8 pcs | 1/2/20     |          | 0.00      | 0.00    | QC 2 - 1               |           | 1/11/19  |
|       |                        |       |            |          |           |         | QC 2 - 12              |           |          |
|       |                        |       |            |          |           |         | QC 2 - 14              |           |          |
|       |                        |       |            |          |           |         | QC 2 - 17              |           |          |
|       |                        |       |            |          |           |         | QC 2 - 19              |           |          |
|       |                        |       |            |          |           |         | QC 2 - 2               |           |          |
|       |                        |       |            |          |           |         | QC 2 - 20              |           |          |
|       |                        |       |            |          |           |         | QC 2 - 22              |           |          |
|       |                        |       |            |          |           |         | QC 2 - 23              |           |          |
|       |                        |       |            |          |           |         | QC 2 - 25              |           |          |
|       |                        |       |            |          |           |         | QC 2 - 32              |           |          |
|       |                        |       |            |          |           |         | QC 2 - 33              |           |          |
|       |                        |       |            |          |           |         | QC 2 - 35              |           |          |
|       |                        |       |            |          |           |         | QC 2 - 39              |           |          |
|       |                        |       |            |          |           |         | QC 2 - 4               |           |          |
|       |                        |       |            |          |           |         | QC 2 - 40              |           |          |
|       |                        |       |            |          |           |         | QC 2 - 44              |           |          |
|       |                        |       |            |          |           |         | QC 2 - 45              |           |          |
|       |                        |       |            |          |           |         | QC 2 - 48              |           |          |
|       |                        |       |            |          |           |         | QC 2 - 49              |           |          |
|       |                        |       |            |          |           |         | QC 2 - 50              |           |          |
|       |                        |       |            |          |           |         | QC 2 - 51              |           |          |
|       |                        |       |            |          |           |         | QC 2 - 52              |           |          |
|       |                        |       |            |          |           |         | QC 2 - 57              |           |          |
|       |                        |       |            |          |           |         | QC 2 - 62              |           |          |
|       |                        |       |            |          |           |         | QC 2 - 63              |           |          |
|       |                        |       |            |          |           |         | QC 2 - 8               |           |          |
|       |                        |       |            |          |           |         | QC 2 - 66              |           |          |
|       |                        |       |            |          |           |         | QC 2 - 64              |           |          |



**Container No:** S238324



**Part:** RBWA353A04-08

**Job No:** 204116

**Serial No/Batch:** S238324

**Revision:** F

**Inspector:**

**Exp Date:**

**Instructions:**

Dart Aerospace Ltd.  
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CANADA  
TEL.: 1 613 632-5200  
Email: sales@dartaero.com  
www.dartaerospace.com

Date: 12/09/19

Plex 12/3/19 9:12 AM Dart.lajeunesse.marie

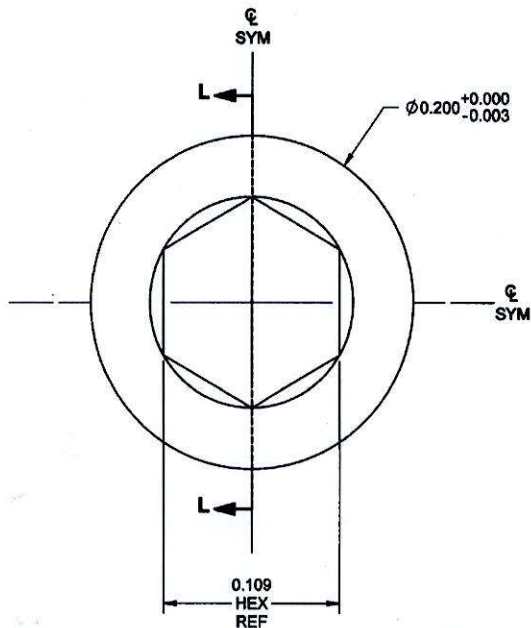
|     |                             |       |        |           |                        |      |
|-----|-----------------------------|-------|--------|-----------|------------------------|------|
| 120 | QC 8                        | 8 pcs | 1/2/20 | 0.00 0.00 | QC 2 - 65              |      |
|     |                             |       |        |           | QC 2 - 5               |      |
|     |                             |       |        |           | QC 2 - 71              |      |
|     |                             |       |        |           | QC 2 - 73              |      |
|     |                             |       |        |           | QC 2 - 69              |      |
|     |                             |       |        |           | QC 8 - 12              |      |
|     |                             |       |        |           | QC 8 - 14              |      |
|     |                             |       |        |           | QC 8 - 17              |      |
|     |                             |       |        |           | QC 8 - 20              |      |
|     |                             |       |        |           | QC 8 - 25              |      |
|     |                             |       |        |           | QC 8 - 3               |      |
|     |                             |       |        |           | QC 8 - 32              |      |
|     |                             |       |        |           | QC 8 - 33              |      |
|     |                             |       |        |           | QC 8 - 35              |      |
|     |                             |       |        |           | QC 8 - 39              |      |
|     |                             |       |        |           | QC 8 - 4               |      |
|     |                             |       |        |           | QC 8 - 44              |      |
|     |                             |       |        |           | QC 8 - 45              |      |
|     |                             |       |        |           | QC 8 - 49              |      |
|     |                             |       |        |           | QC 8 - 58              |      |
|     |                             |       |        |           | QC 8 - 8               |      |
|     |                             |       |        |           | QC 8 - 9               |      |
|     |                             |       |        |           | QC 8 - 68              |      |
|     |                             |       |        |           | QC 8 - 67              |      |
|     |                             |       |        |           | QC 8 - 1 (A)           |      |
|     |                             |       |        |           | QC 8 - 47              |      |
|     |                             |       |        |           | QC 8 - 40              |      |
|     |                             |       |        |           | QC 8 - 52              | DAS  |
|     |                             |       |        |           | QC 8 - 23              | 23   |
|     |                             |       |        |           | QC 8 - 57              | 9-89 |
|     |                             |       |        |           | QC 8 - 76              |      |
|     |                             |       |        |           | QC 8 - 61              |      |
| 130 | Packaging 3-1 - Stock - B4B | 8 pcs | 1/2/20 | 0.00 0.00 | Packaging 3 - 1 - B4B  |      |
|     |                             |       |        |           | Packaging 3 - 2 - B4B  |      |
|     |                             |       |        |           | Packaging 3 - 3 - B4B  |      |
|     |                             |       |        |           | Packaging 3 - 4 - B4B  |      |
|     |                             |       |        |           | Packaging 3 - 5 - B4B  |      |
|     |                             |       |        |           | Packaging 3 - 6 - B4B  | DAS  |
|     |                             |       |        |           | Packaging 3 - 7 - B4B  | 28   |
|     |                             |       |        |           | Packaging 3 - 8 - B4B  | 9-89 |
|     |                             |       |        |           | Packaging 3 - 9 - B4B  |      |
|     |                             |       |        |           | Packaging 3 - 10 - B4B |      |
|     |                             |       |        |           | Packaging 3 - 11 - B4B |      |
|     |                             |       |        |           | Packaging 3 - 12 - B4B |      |
|     |                             |       |        |           | Packaging 3 - 13 - B4B |      |
|     |                             |       |        |           | Packaging 3 - 14 - B4B |      |
|     |                             |       |        |           | Packaging 3 - 15 - B4B |      |
|     |                             |       |        |           | Packaging 3 - 16 - B4B |      |
|     |                             |       |        |           | Packaging 3 - 17 - B4B |      |
|     |                             |       |        |           | Packaging 3 - 18 - B4B |      |
|     |                             |       |        |           | Packaging 3 - 19 - B4B |      |
|     |                             |       |        |           | Packaging 3 - 20 - B4B |      |
|     |                             |       |        |           | Packaging 3 - 21 - B4B |      |
|     |                             |       |        |           | Packaging 3 - 22 - B4B |      |
|     |                             |       |        |           | Packaging 3 - 23 - B4B |      |
|     |                             |       |        |           | Packaging 3 - 24 - B4B |      |
|     |                             |       |        |           | Packaging 3 - 25 - B4B |      |
|     |                             |       |        |           | Packaging 3 - 26 - B4B |      |
|     |                             |       |        |           | Packaging 3 - 27 - B4B |      |

|                                                                                                                                                                                                                                                                                                 |                                           |                 |                            |                  |                        |           |  |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|-----------------|----------------------------|------------------|------------------------|-----------|--|--|
|                                                                                                                                                                                                                                                                                                 |                                           |                 |                            |                  | Packaging 3 - 28 - B4B |           |  |  |
|                                                                                                                                                                                                                                                                                                 |                                           |                 |                            |                  | Packaging 3 - 29 - B4B |           |  |  |
|                                                                                                                                                                                                                                                                                                 |                                           |                 |                            |                  | Packaging 3 - 30 - B4B |           |  |  |
|                                                                                                                                                                                                                                                                                                 |                                           |                 |                            |                  | Packaging 3 - 31 - B4B |           |  |  |
|                                                                                                                                                                                                                                                                                                 |                                           |                 |                            |                  | Packaging 3 - 32 - B4B |           |  |  |
|                                                                                                                                                                                                                                                                                                 |                                           |                 |                            |                  | Packaging 3 - 33 - B4B |           |  |  |
|                                                                                                                                                                                                                                                                                                 |                                           |                 |                            |                  | Packaging 3 - 34 - B4B |           |  |  |
|                                                                                                                                                                                                                                                                                                 |                                           |                 |                            |                  | Packaging 3 - 35 - B4B |           |  |  |
|                                                                                                                                                                                                                                                                                                 |                                           |                 |                            |                  | Packaging 3 - 36 - B4B |           |  |  |
| 140                                                                                                                                                                                                                                                                                             | QC 21 - SA                                | 8 pcs           | 1/2/20                     | 0.00 0.00        | QC 21 - SA - 21        | DAS<br>21 |  |  |
|                                                                                                                                                                                                                                                                                                 |                                           |                 |                            |                  | QC 21 - SA - 70        | 21        |  |  |
|                                                                                                                                                                                                                                                                                                 |                                           |                 |                            |                  | QC 21 - SA - 53        | 21        |  |  |
| Part Op 100 - (Manufacture as per dwg) Machine to length as per DWG<br>Descriptions: 110 - (QC2- Inspect parts off machine FAI/FAIB)<br>120 - (QC8- Inspect parts - second check)<br>130 - (Identify as per dwg & Stock Location: _____)<br>140 - (QC21- Final Inspection - Work Order Release) |                                           |                 |                            |                  |                        |           |  |  |
| DEC 1 0 2019                                                                                                                                                                                                                                                                                    |                                           |                 |                            |                  |                        |           |  |  |
| <b>Job BOM</b>                                                                                                                                                                                                                                                                                  |                                           |                 |                            |                  |                        |           |  |  |
| <b>Part / Item</b>                                                                                                                                                                                                                                                                              | <b>Component Name</b>                     | <b>Quantity</b> | <b>Operation</b>           | <b>Container</b> |                        |           |  |  |
| 92185A143                                                                                                                                                                                                                                                                                       | SS316 Socket Head Screw #6-32 X 1/8" Long | 8 Ea (1 ea)     | 100-Conventional Lathe - 1 | S235573<br>GA053 |                        |           |  |  |
| <b>Job Allocations</b>                                                                                                                                                                                                                                                                          |                                           |                 |                            |                  |                        |           |  |  |
| <b>Operation</b>                                                                                                                                                                                                                                                                                | <b>Component Part</b>                     | <b>Required</b> | <b>Inventory</b>           | <b>Allocated</b> |                        |           |  |  |
| 100-Conventional Lathe - 1                                                                                                                                                                                                                                                                      | 92185A143                                 | 8               | 25                         | 0                |                        |           |  |  |
| <b>Part Specifications</b>                                                                                                                                                                                                                                                                      |                                           |                 |                            |                  |                        |           |  |  |
| Specifications could not be found.                                                                                                                                                                                                                                                              |                                           |                 |                            |                  |                        |           |  |  |

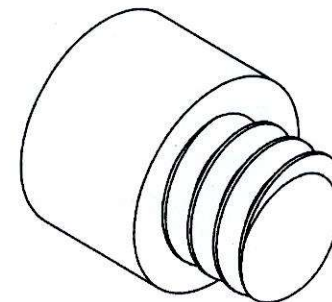
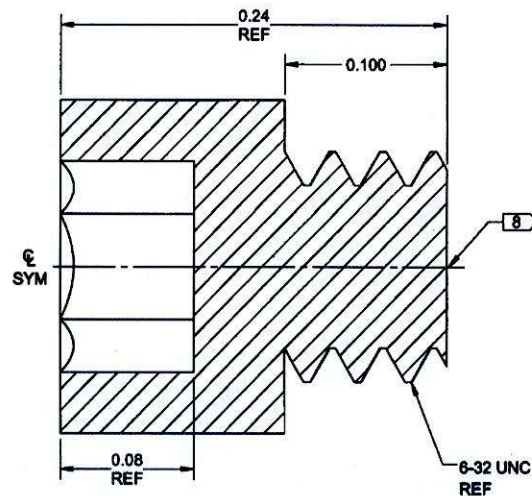
Plex 12/3/19 9:12 AM Dart.lajeunesse.marie







**RBWA353A04-08 SCREW**



SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 204116

MJS  
19-12-03

**NOTES:**

- 1) MATERIAL: McMaster#92185A143 OR EQUIV (SS316 SOCKET HEAD SCREW #6-32 X 1/8" LG.)
- 2) HEAT TREAT: N/A
- 3) FINISH: N/A
- 4) TOLERANCES: X.X =  $\pm 0.1"$  /  $\pm 1"$   
X.XX =  $\pm 0.01"$  /  $\pm 0.5"$   
X.XXX =  $\pm 0.005"$  /  $\pm 0.1"$   
X.XXXX =  $\pm 0.0005"$  /  $\pm 0.05"$   
PARALLELISM, ECCENTRICITY AND SYMMETRY ABOUT ALL CENTER LINES =  $\pm 0.005"$
- 5) UNITS: INCHES UNLESS OTHERWISE NOTED
- 6) REMOVE ALL SHARP EDGES AND BURRS
- 7) IDENTIFICATION: N/A
- 8) CENTER DRILL IS ACCEPTABLE

|            |            |                                                                                                                                                                                                                                                                                                  |               |
|------------|------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| DESIGN     | VM         | <b>DART AEROSPACE LTD</b>                                                                                                                                                                                                                                                                        |               |
| DRAWN      | VM         | HAWKESBURY, ONTARIO, CANADA                                                                                                                                                                                                                                                                      |               |
| CHECKED    | KPT        | TOOL PART #                                                                                                                                                                                                                                                                                      | REV. F        |
| MFG. APPR. | JFG        | <b>RBWA353A04</b>                                                                                                                                                                                                                                                                                | SHEET 9 OF 10 |
| APPROVED   |            | TITLE                                                                                                                                                                                                                                                                                            | SCALE         |
|            |            | <b>PMC OIL FILLING QUICK DISCONNECT</b>                                                                                                                                                                                                                                                          | NTS           |
| DATE       | 2019-11-14 | <small>COPYRIGHT © 2019 BY DART AEROSPACE LTD<br/>THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS<br/>NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT<br/>WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small> |               |

Entered: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No. \_\_\_\_\_

Route update only ☐

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |                        |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|------------------------|--|
| Job: _____<br><br>Part No. _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <b>DISPOSITION</b><br><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/> | <b>DEPARTMENT/PROCESS</b><br><br><div style="display: flex; justify-content: space-between;"> <div>           Skid-tube <input type="checkbox"/><br/>           Machining <input type="checkbox"/><br/>           Large Fab <input type="checkbox"/> </div> <div>           Cross tube <input type="checkbox"/><br/>           Small Fab <input type="checkbox"/><br/>           Finishing <input type="checkbox"/> </div> <div>           Eng. (Non-AW) <input type="checkbox"/><br/>           Prod. Eng. Coord. <input type="checkbox"/><br/>           Rec/Store/Packaging <input type="checkbox"/> </div> <div>           Engineering <input type="checkbox"/><br/>           Water Jet <input type="checkbox"/><br/>           Supplier <input type="checkbox"/><br/>           Quality <input type="checkbox"/> </div> </div>                                                                                                                                                                                                                                                                      |  |                        |  |
| Date :                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Sequence #:                                                                                                                       | QTY Affected :                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  | MRB (QSI042)           |  |
| Description Work Order Deviation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                   | Disposition                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  | Completed By           |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  | Lead hand / Supervisor |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |                        |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |                        |  |
| <b>Root Cause</b><br><br><div style="display: flex;"> <div style="flex: 1;">           Operator <input type="checkbox"/><br/>           Manufacturing Process <input type="checkbox"/><br/>           Equip/Tooling <input type="checkbox"/><br/>           Handling/Presservation <input type="checkbox"/><br/>           Material <input type="checkbox"/><br/>           Product Improvement <input type="checkbox"/><br/>           Process Improvement <input type="checkbox"/><br/>           Human Factors <input type="checkbox"/> </div> <div style="flex: 1;"> <input type="checkbox"/> Pressure/Forced<br/> <input type="checkbox"/> Bending<br/> <input type="checkbox"/> Crushing<br/> <input type="checkbox"/> Cracks<br/> <input type="checkbox"/> Crimp/Kink/Ripple/Wave/Twist<br/> <input type="checkbox"/> Marks/Chatter<br/> <input type="checkbox"/> Mislabeled         </div> </div> |                                                                                                                                   | <b>FAULT CATEGORY</b><br><br><div style="display: flex;"> <div style="flex: 1;"> <input type="checkbox"/> Contamination<br/> <input type="checkbox"/> Misaligned/off center<br/> <input type="checkbox"/> BOM/Route<br/> <input type="checkbox"/> Broken/Damage/Defect<br/> <input type="checkbox"/> Incomplete/Unclear Instructions<br/> <input type="checkbox"/> Drill Holes<br/> <input type="checkbox"/> Fit/Function         </div> <div style="flex: 1;"> <input type="checkbox"/> Power Loss/Surge<br/> <input type="checkbox"/> Folio/Program<br/> <input type="checkbox"/> Grain Direction<br/> <input type="checkbox"/> Weld<br/> <input type="checkbox"/> Wrong Stock Pulled<br/> <input type="checkbox"/> Out of Sequence<br/> <input type="checkbox"/> Off-set/Set-up         </div> <div style="flex: 1;"> <input type="checkbox"/> Positioned Wrong<br/> <input type="checkbox"/> Outside Tolerance<br/> <input type="checkbox"/> Drawing<br/> <input type="checkbox"/> Finish<br/> <input type="checkbox"/> Part Lost/Missing<br/> <input type="checkbox"/> Misread         </div> </div> |  |                        |  |
| Other/Details:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |                        |  |